

In the Specification

On page 1 of the Specification, after the title and before the section entitled "Technical Field", please insert the following section.

Related Application

This application claims priority of British Patent Application No. 0114055.7, filed June 9, 2001 and British Patent Application No. 0101927.2, filed January 23, 2001, herein incorporated by reference.

Kindly amend first paragraph on Page 1 as follows:

~~Background of the Invention~~ Technical Field

This invention disclosure relates to pipe couplings and assemblies.

Kindly amend second paragraph on Page 1 as follows:

Background

Connection to a corrugated pipe or conduit can be made by means of a coupling in which the end of the pipe is inserted, the coupling having a retaining member in the form of a resilient tooth that engages between corrugations to prevent the pipe and coupling being pulled apart after assembly. The coupling may have a tapering bore forming a close fit with the outside of the pipe so as to seal the pipe with the coupling. Couplings of this kind are described, for example, in U.S. Pat. Nos. 5,094,482, 5,041,256, GB2225550, U.S. Pat. Nos. 5,150,930 and 4,923,227 and are sold by Adaptaflex Limited of Coleshill, Birmingham, UK. Although the seal provided by these couplings is satisfactory in many situations, there are some applications where a more effective seal is needed.

Kindly amend third paragraph on Page 1 as follows:

~~Brief Summary of the Invention~~

~~It is an object of the present invention to provide an alternative pipe coupling and assembly.~~

Kindly amend fourth paragraph on Page 1 as follows:

~~According to one aspect of the present invention there is provided~~ I provide a coupling for a pipe, the coupling including a housing and retaining means for retaining the pipe within the housing, the housing having a bore therein, the coupling being of a relatively rigid plastics material and having a layer of a relatively deformable material ~~moulded~~ onto at least a part of both its inner and outer surfaces.

Kindly amend second paragraph on Page 2 as follows:

~~According to another aspect of the present invention there is provided~~ I also provide an assembly of a corrugated pipe and a coupling according to the above one aspect ~~of the invention.~~

Kindly amend third paragraph on Page 2 as follows:

~~According to a~~ I further aspect of the present invention there is provided provide a method of forming a coupling including the steps of injecting a first material of a relatively hard plastics material to form a housing of the coupling with integral retaining means and subsequently injecting a second, softer material to form a layer on the harder material both on the inside and outside of the housing.

Kindly amend fourth paragraph on Page 2 as follows:

~~According to a fourth aspect of the present invention there is provided~~ I still further provide a coupling made by ~~[[a]]~~ the above method ~~according to the above further aspect of the present invention.~~

Kindly amend first paragraph on Page 3 as follows:

A coupling, an assembly of the coupling on a conduit and a method of forming the coupling ~~according to the present invention,~~ will now be described, by way of example, with reference to the accompanying drawings.

Kindly amend third paragraph on Page 3 as follows:

Detailed Description of the Preferred Embodiment

The assembly comprises a conduit 1 and a coupling 2 fitted on the forward, left-hand end 10 of the conduit.

Kindly amend paragraph spanning Pages 3 and 4 as follows:

The coupling 2 comprises two parts joined with one another, namely a body or housing 20 and a layer 21. The housing 20 is similar to previous housings, being a single-piece moulding of a rigid plastics material of substantially tubular shape. The housing 20 has a bore 22 extending axially along its length and divided by a shoulder 23 into two portions, namely an entrance portion 24 and an exit portion 25. The rear entrance portion 24 at the right-hand end of the housing 20 receives the end of the conduit 1 and tapers slightly along its length. The forward, exit portion 25 has a reduced constant diameter. Towards its right-hand end, the housing 20 is formed with retaining means in the form of two retaining or locking arms or catches 27 and 28 each having an inwardly-extending tooth 29 at its free, left-hand end extending across the central region of the arms. The coupling could have any number of one or more locking arms. The right-hand end of each arm 27 and 28 is attached integrally with the housing 20 by a hinge portion 30 of reduced thickness, which enables the arms to be flexed resiliently outwardly. Each arm 27 and 28 has two opposite side regions 31, which are formed with a shallow ramp 32 of triangular section just rearwardly of the teeth 29. The purpose of the ramps 32 is to aid removal of the coupling from its mould tool in the manner described in GB 2225550. The side regions 31 project to the left forwardly beyond the teeth 29 a short distance to form stops 131. The purpose of these stops 131 is to engage the outside of the conduit 1 when the arms 27 and 28 are deflected inwardly as a result of a high force applied to pull the conduit out of the coupling 2. The stops 131 limit how far the arms 27 and 28 can be pulled in and, therefore, reduce

the risk of damage to the arms. The natural position of the locking arms 27 and 28 is with their teeth 29 projecting slightly into the bore 22, as shown in FIGS. 2 and 3.

Kindly amend first paragraph on Page 6 as follows:

Preferably, the layer 21 is formed using a two-shot injection moulding process so that the seal is formed by the same machine that moulds the housing 20. The housing 20 is moulded on one core pin, which is then removed and a smaller diameter core pin is used to mould the internal elastomeric layer, between the outside of the second core pin and the inside of the housing. The elastomeric material can be injected into the mould from the right-hand end of the housing so that it flows over both the inner surface and over the outer regions 43 and 45 into the flange portion 44, as one continuous layer. It will be appreciated, however, that material to form the inner and outer layers could be injected separately. Because the seal part 42 is moulded into the housing 20, it is securely bonded with it and forms an effective seal with the inside of the housing.

Kindly amend first paragraph on Page 7 as follows:

It will be appreciated that the invention structure is not limited to use with conduits but could be used on other forms of pipe. Alternative locking means could be used, such as with uncorrugated pipes. The retaining means could be provided by a separate component.